AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE OF PAGES 1 | 9

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
0003	07/03/00	351-0-0944	

6. ISSUED BY CODE

NAT.INST.OF STANDARDS & TECHNOLOGY
ACQUISITION & ASSISTANCE DIVISION
BUILDING 301, ROOM B117
100 BUREAU DRIVE, STOP 3572
GAITHERSBURG, MD 20899-3572

7. ADMINISTERED BY (If other than Item 6) CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code)

TO ALL OFFERORS

X	9A. AMENDMENT OF SOLICITATION NO. 52SBNB0C1045
	9B. DATED (SEE ITEM 11) 05/19/00
	10A. MODIFICATION OF CONTRACT/ORDER NO.
	10B. DATED (SEE ITEM 13)

CODE FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

See Continuation Sheet(s)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) PAULINE E. MALLGRAVE CONTRACTING OFFICER	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY Pauline E. Mallgrave (Signature of Contracting Officer)	16C. DATE SIGNED 7-3-00

A. Part I - The Schedule, Section B - Supplies or Services and Prices/Costs is revised and included as Attachment 1 to this amendment.

B. Part III, Section J.2 LIST OF ATTACHMENTS, Attachment One - Specification is amended as follows:

1. Volume 1, Division 3, Section 03300 – Concrete Materials and Proportioning revise Concrete Properties Table, Metrology Perimeter Wall Footings to refer to Note D., 5, not D., 3.

2. Volume 1, Division 3, Section 03300 – Concrete Materials and Proportioning Revise Paragraph 3.02.D.5 as follows:

   Change the word “coved” to read “cured”.

3. Volume 1, Division 5, Section 05120 – Structural Steel revise Paragraph 1.02.A.b. to read as follows:

   Code of Standard Practice for Steel Buildings and Bridges dated March 7, 2000. (Referred to in this specification as the AISC Code of Standard Practice).

4. Volume 2, Division 8, Section 08100 – Metal Doors and Frames add Paragraph 1.01.C through 1.01.C.2 to read as follows:

   C. Sound control door assemblies.
      1. Certified for STC rating indicated according to ASTM-E413.
      2. Tested according to ASTM-E90.

5. Volume 2, Division 8, Section 08100 – Metal Doors and Frames add Paragraph 1.02.D to read as follows:

      2. Sound control assembly certificates: Signed by manufacturer certifying that each sound control door complies with requirements.

6. Volume 2, Division 8, Section 08100 – Metal Doors and Frames Add Paragraph 2.04 through 2.04.D.2 to read as follows:

2.04 FABRICATION - SOUND CONTROL DOORS

A. Provide sound control door assemblies where scheduled in Section 08000, certified for STC rating indicated.

B. Provide assemblies complete with reinforcement, anchors and supports, gasketing, thresholds, door bottoms, hinges when integral with design, and other appurtenances required for sound control.
   1. Comply with requirements otherwise indicated for doors and frames except where more stringent requirements are required for sound rating indicated.
   2. Sound seals: Provide gasketing system to provide sound rating indicated, including compression or magnetic one-piece head and jab seals, and automatic door bottom at sill with smooth threshold.
      a. Where automatic door bottom is impratical, Contractor may instead provide compression seals with cam-lift hinges at door bottom.

C. Where fire-rated door assemblies are also indicated, provide assemblies complying with NFPA-80 that are identical to assemblies tested and listed by UL for fire rating indicated.

D. Acceptable manufacturers:
   1. Sound control door assemblies:
      a. Base:
         (1) Overly Manufacturing.
      b. Optional:
         (2) Ambico.
         (3) Industrial Acoustics.
         (4) Jamison.
         (5) Kreiger Steel Products.
         (6) Pioneer Industries.
   2. Other manufacturers desiring approval comply with Section 01640.

7. Volume 2, Division 9, Section 09515 – Suspended Metal Ceiling add Paragraph 2.01.1.b(3) to read as follows:

(3) Simplex Ceilings.

8. Volume 2, Division 9, Section 09515 – Suspended Metal Ceiling add Paragraph 2.01.A.2.b(2) to read as follows:

(2) Simplex Ceilings.

9. Volume 2, Division 9, Section 09515 – Suspended Metal Ceiling add Paragraph 2.01.A.3.b(3) to read as follows:

(3) Simplex Ceilings.

10. Volume 2, Division 10 - Delete Section 10520 Fire Protection Specialties from the Specification.

11. Volume 2, Division 13, Section 13064 – Cleanroom Flow Through Grid System revise Paragraph 2.01.H.2 to read as follows:

2. Circuiting to each light fixture to be provided under Division 16.

12. Volume 2, Division 13, Section 13064 – Cleanroom Flow Through Grid System delete Paragraph 2.01.H.2.a.

13. Volume 3, Division 15, Section 15930 – Air Terminal Units add Paragraph 2.01.A.1.b.(5) to read as follows:

(5) Nailor Industries.

14. Volume 4, Division 16, Section 16320 - Network Transformer revise Paragraph 2.02.A.4 to read as follows:

4. Transformers shall be completely assembled at the factory including dielectric fluid, high voltage 3-position switch, terminal chamber and all accessories.

15. Volume 4, Division 16, Section 16320 – Network Transformers add Paragraphs 2.08 through 2.09 to read as follows:

2.08 Transition Section

A. Provide transition section on load side of isolating switch to accept incoming insulated ground bus (neutral) from the transformer and outgoing busduct.

2.09 Insulated Ground Bus (Neutral).

A. Provide insulated ground bus (neutral) from transformer XO terminals to transition section. Bus, connections and terminals shall be fully insulated. Bus shall be silver-plated copper as specified in Section 16427.

16. Volume 4, Division 16, Section 16320 – Network Transformers revise Paragraph 3.01.A to read as follows:

A. Install network transformer, isolating switch, transition section, insulated ground bus, etc. as indicated on drawings, in accordance with equipment manufacturer's written instructions and with recognized industry practices to ensure that network transformers comply with requirements.

17. Volume 4, Division 16, Section 16512 – Low Voltage Lighting Control and Dimming System revise Paragraphs 2.04.A.3 and 2.05.A.3 each to read as follows:

3. Cabinet shall be prewired factory assembly. Contractor wiring shall be limited to connecting line, load and control wiring to labeled terminals within the cabinet.

18. Volume 4, Division 16, Section 16512 – Low Voltage Lighting Control and Dimming System delete Paragraphs 2.02.C.3, 2.04.A.4 and 2.05.A.4.

19. Volume 4, Division 16, Section 16611 – Uninterruptible Power Supply System add Paragraph 2.01.P.1.a to read as follows:

a. Battery disconnect shall be shunt trip circuit breaker type rated per manufacturers recommendations. Provide shunt trip control circuit from UPS control panel.

20. Volume 4, Division 16, Section 16611 – Uninterruptible Power Supply System add Paragraphs 2.01.P.7 and 2.01.P.8 to read as follows:

7. Inter-cell and inter-tier connections shall be lead plated copper with corrosion resistant bolts and coated terminals as required by manufacturer.
8. Correcting cable shall be extra flexible locomotive or welding type, 600 volt insulated copper. Size and quantity of cable and support of cable shall be as recommended by manufacturer.

21. Volume 4, Division 16, Section 16611 – Uninterruptible Power Supply System add Paragraphs 3.02.C through 3.02.E as follows:

C. Install batteries on racks, inter-cell and inter-tier connections, etc. to provide a complete battery plant as recommended by the manufacturer.
D. Wall mount battery disconnect between battery rack and UPS.
E. Install connecting cable and cable support system between battery plant and battery disconnect and between battery disconnect and UPS.

22. Volume 4, Division 16,Section 16720 – Fire Alarm System add Paragraphs 1.01.A.1.f. through 1.01.A.1.f.(3) to read as follows:

f. Circuit Performance shall be as follows:
(1) Initiating Device Circuits (IDC) shall be Class A, Style D. In the event of a single open, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm receipt capability. In the event of a single ground, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm receipt capability. In the event of a wire-to-wire short, an alarm signal shall be transmitted.
(2) Signaling Line Circuits (SLC) shall be Class A, Style 7. In the event of a single open, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm receipt capability. In the event of a single ground, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm receipt capability. In the event of a wire-to-wire short, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm receipt capability. In the event of a wire-to-wire short and open, a trouble signal shall be transmitted to the fire alarm control panel. In the event of a wire-to-wire short and ground, a trouble signal shall be transmitted to the fire alarm control panel. In the event of an open and a ground, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm receipt capability. In the event of a loss of carrier (if used)/channel interface, a trouble signal shall be transmitted to the fire alarm control panel.
(3) Notification Appliance Circuits (NAC) shall be Class A, Style Z. In the event of a single open, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm capability. In the event of a single ground, a trouble signal shall be transmitted to the fire alarm control panel and the circuit shall have alarm capability. In the event of a wire-to-wire short, a trouble signal shall be transmitted to the fire alarm control panel.

23. Volume 4, Division 17, Section 17000 is amended to include Attachment 2, Division 17 Clarifications, to this amendment.

24. Volume 5, Appendix – Electrical Schedules revise Sequence Number 591, Panelboard No. A6-1-FF.8/9.5-1, Circuits 13 (SF-304) and 25 (SF-305) as follows:

Change Load Per Phase from 3040 VA to 3880 VA and change Circuit Breaker Amps from 30 to 35.

C. Part III, Section J.2 LIST OF ATTACHMENTS, Attachment Two - Drawings is amended as follows:

1. Revise references to "ATL" in the index of drawings or in the sheet title block of any drawing to "AML".

2. Sheet No. M8-02 – Mechanical Schedules

Revise Fan Schedule as follows:

For SF-304, change motor kW from 5.6 to 7.5.
For SF-305, change motor kW from 5.6 to 7.5.

3. Sheet No. M8-03 – Mechanical Schedules

Revise Cooling Coil Schedule as follows:

Entering water temperature should be 0.0 degC, instead of blank, for CC-103B, CC-104B, CC-201B, CC-203B, CC-204B, and CC-209B.

4. Sheet No. E0-02 – 15 kV Electrical Distribution Campus Site Plan

Revise Plan as indicated on attached Amendment Drawing No. AM-3-A/E0-02.

5. Sheet No. E1-16 – Level One - F - Distribution Plan - CleanRoom Lighting

Revise Keyed Note No. 1 as follows:

Delete "for lighting provided under offer option 1#, refer to Sheet E1-16-OP."

6. Sheet No. E2-01– Lower Level - West Floor Plan - Metrology – Power

Revise Plan as follows:

In Mechanical Room MW1013 change supply fan SF-304 and SF-305 kW rating from 5.6 to 7.5.

7. Sheet No. E5-13 – Telecommunication Grounding Details

Revise Detail No. 2/E5-13 as follows:

Change note "provide 10 - 11x19 mm bolts" to "provide 11x19 mm bolts, see note 10."

8. Sheet No. E5-13 – Telecommunication Grounding Details

Revise Detail No. 3/E5-13 as follows:

Change note "brazed connection to mesh and reinforcing rods" to "exothermic weld connection to mesh and reinforcing rod."

9. Sheet No. E5-16 – Lighting Control Diagrams

Revise Detail No. 4, 5, 6, 7, 8, and 9 as follows:

Delete reloc connectors. Line, load and control circuits shall be hard wired to labeled terminals within the relay or dimming cabinets.

10. Sheet No. E5-17 – Substation Details and Schedules

Revise Typical Transformer and SwitchGear Section as indicated on Amendment Drawing No. AM-3-A/E5-17.

11. The following drawings are attached:

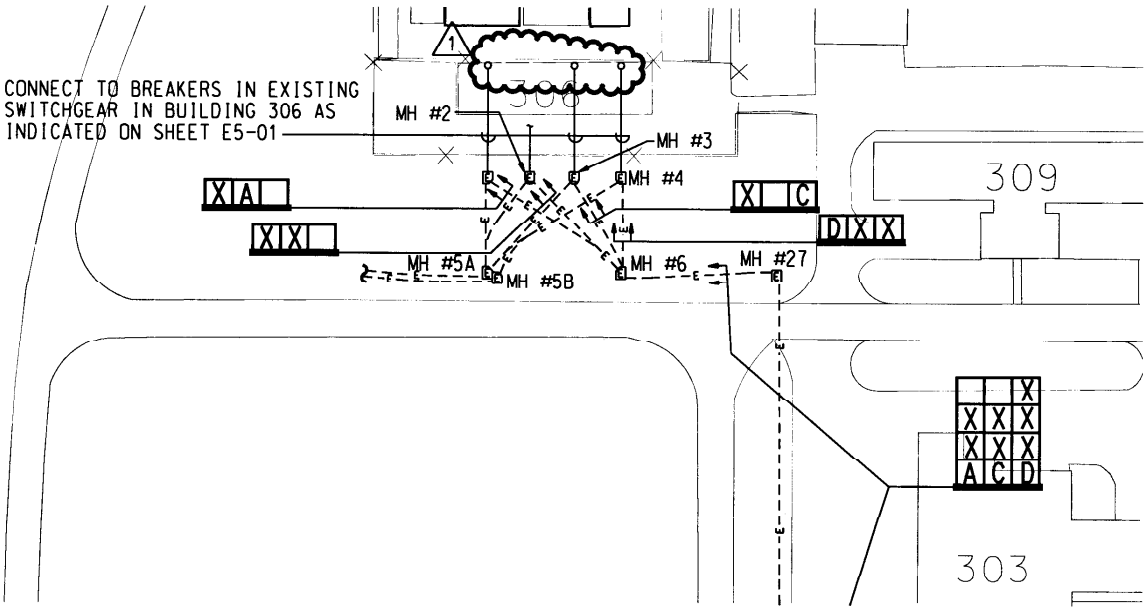
Reference Sheet E0-02 dated June 21, 2000
Reference Sheet E5-17 dated June 21, 2000

D. Part III, Section J.2 LIST OF ATTACHMENTS is amended to include:

Attachment Seven: Award Fee Determination Plan dated July 3, 2000 (20 pages)

E. Part IV, Section K.6 SMALL BUSINESS PROGRAM REPRESENTATIONS (a) (2) is amended to increase the small business size standard effective on July 17, 2000 from $17.0 to $27.5 million average annual receipts for an offeror's preceeding 3 fiscal years.

F. Questions have been received from potential offerors and are answered in Request and Answer Log, Attachment 3 of this amendment.



HDR Architecture, Inc

Project Title NIST		**Reference Sheet** E0-02	**Project Number** 07575 068 030
Sheet Title 15kV ELECTRICAL DISTRIBUTION CAMPUS SITE PLAN		**Amendment Number** 3	**Date** 21 JUNE 2000
		Am. Drawing AM-3-A/E0-02	**Project Manager** A. SOUEID

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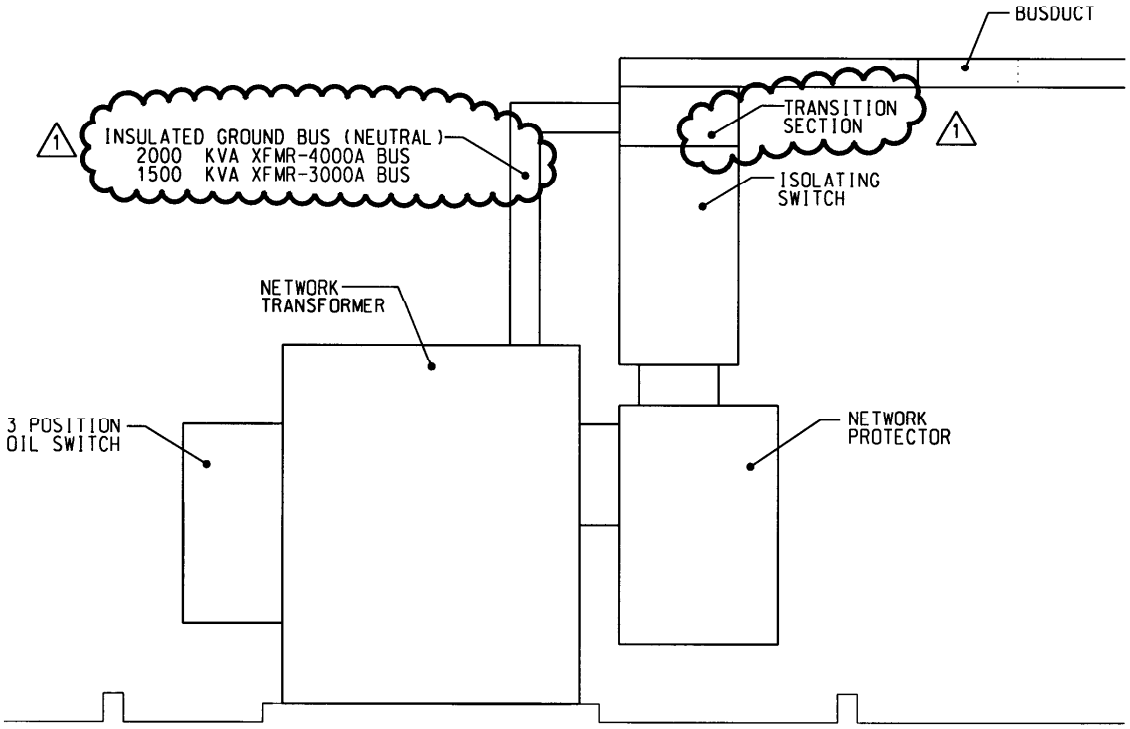

HDR Architecture, Inc.

Project Title NIST		**Reference Sheet** E5-17	**Project Number** 07575 068 030
Sheet Title SUBSTATION DETAILS AND SCHEDULES		**Amendment Number** 3	**Date** 21 JUNE 2000
		Am. Drawing AM-3-A/E5-17	**Project Manager** A. SOUEID

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PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 SCHEDULE OF ITEMS

Contract Line Item No. (CLIN)	Supply/Service	Qty.	Unit	Unit Price	Amount
BASE PRICE CLINs					
0001	Contractor shall supply all labor, materials, equipment and supervision to construct the NIST Advanced Measurement Laboratory (AML); except as required for laboratory casework, temperature controls, and demountable partitions described in CLINs 0002, 0003 and 0004.	1	Lump Sum (LS)	$_____	$_____
0002	Contractor shall supply all labor, materials, equipment and supervision to provide laboratory casework in accordance with Specifications 11601, 11610, and 11620, and as indicated on drawings. Include the price for mechanical and electrical rough-ins and final connections in CLIN 0001.	1	LS	$_____	$_____
0003	Contractor shall supply all labor, materials, equipment and supervision to provide temperature controls in accordance with Specification Section 17000 and as indicated on drawings.	1	LS	$_____	$_____
0004	Contractor shall supply all labor, materials, equipment and supervision to provide demountable partitions (DP) in accordance with Specification Section 10625 and as indicated on drawings.	1	LS	$_____	$_____

UNIT PRICE CLINs

		EST.QTY.			
0005	Remove/replace unsuitable subgrade material with suitable compacted backfill material from project site in accordance with Specification Sections 02221 and 02222.	1000	Cubic Meters (CM)	$_____	$_____
		EST. QTY.			
0006	Remove/replace unsuitable subgrade material with suitable compacted backfill from other than project site in accordance with Specification Sections 02221 and 02222.	1000	CM	$_____	$_____
		EST. QTY.			
0007	Remove rock and replace with suitable compacted backfill material in accordance with Specification Sections 022210 and 022221.	200	CM	$_____	$_____
		EST. QTY.			
0008	Provide 75mm thick unreinforced lean concrete working slab in accordance with Specification Section 02222, to protect footings and other subgrades.	900	CM	$_____	$_____

OPTION CLINs

NOTE: The contract documents identify certain elements of work as options. The option numbers as listed below correspond to the option numbers in the contract documents. Include the price for Option 1 in base CLINs 0001, 0002, 0003, and do not propose prices for Option Nos. 5, 7, and 11.

0009	Option 1: Not Separately Priced. Clean Room and associated work in Building 215 indicated as Option 1 shall be provided as part of CLINs 0001, 0002, and 0003. Work indicated as part of the base that is directly replaced by corresponding work indicated as part of Option 1, shall not be provided.

0010	Option 2: Provide underground connecting link between the lower level of existing Building 220 and the east end of Metrology East, Building 218, as specified and as Indicated on drawings. See Sheets C4-01, C5-01, A1-05, A6.1-22, S3-18, M1-05, M4-12H, M4-12HP, E1-05, E2-05, and E3-05.	1	LS	$_____	$_____
0011	Option 3: Remove excess excavated earth to designated locations on the NIST property, as indicated on Sheets C7-03 and C7-04, in lieu of removal of excess excavated earth to a Contractor - provided destination off the NIST property.	1	LS	$_____	$_____
0012	Option 4: Provide panelized wall system specified in Specification Section 10620, in the office areas, in lieu of steel stud and gypsum wallboard partitions as indicated on drawings. See Sheets A8.1-28, E2-12 through E2-20, E3-12 through E3-15, And E3-17 through E3-20.	1	LS	$_____	$_____
0013	Option 5: Not Used/Not Separately Priced				
0014	Option 6A and Option 6B:				
0014A	Option 6A: Provide air springs and controls to the A-1 slabs indicated on drawings. Construct A-1 slab resting on pit floor as Detailed on plan sheets S3-10. Provide air springs at A-1 slab locations in accordance with Sheet S3-10 and Passive Control Section 13085, Para. 2.02.	1	LS	$_____	$_____
0014B	Option 6B: Provide active control system to each A-1 slab in accordance with Section 13085, Para. 2.03.	1	LS	$_____	$_____

0015	Option 7: Not Separately Priced.				
0016	Option 8: Provide duplicate back-up heat exchangers for the HVAC piping systems. Piping provisions for the back-up heat exchangers shall be included with CLIN 0001. See Sheets M6-01 through M6-04 and heat exchanger schedules.	1	LS	$_____	$_____
0017	Option 9: Provide landscaping and other site improvements as indicated on Sheet C6-01.	1	LS	$_____	$_____
0018	Option 10: Provide west parking lot adjacent to existing Building 411, as indicated on Sheets C7-01 and E0-04.	1	LS	$_____	$_____
0019	Option 11: Not Used/Not Separately Priced.				
0020	Option 12: Provide phenolic insulation for the HVAC ductwork as specified in Specification Section 15250, Para. 2.04B, instead of fiberglass insulation specified in Specification Section 15250, Para. 2.04A.	1	LS	$_____	$_____
0021	Option 13: Provide paper insulated lead covered (PILC) electrical distribution cable as specified in Specification Section 16121, Para. 2.01.C, instead of EPR electrical distribution cable as specified in Specification Section 16121, Para. 2.01.B.	1	LS	$_____	$_____
0022	Option 14: One year extension to the period provided under the Warranty of Construction Clause FAR 52.246-21.	1	LS	$_____	$_____

0023	Option 15: Provide pricing for the deletion of the requirement to use native BACnet communication and to substitute the use of proprietary HVAC controls communications networks incorporating BACnet gateway device(s) into the system for communication with a NIST site-wide network.	1	LS	$_____	$_____

GRAND TOTAL (CLINs 0001-0023 $_____

B.2 AWARD FEE

(a) The amount of award fee the Contractor earns, if any, is based on a subjective evaluation by the Government of the quality of the Contractor's performance (quality, safety, schedule, and socio-economic) in accordance with the Award Fee Determination Plan, Attachment Seven, of the solicitation. The Government will unilaterally determine the amount of award fee. The determination will be in writing to the Contractor and is not subject to the "Disputes" clause.

(b) The Government may unilaterally change the award fee plan at any time and will provide such changes in writing to the Contractor prior to the beginning of the applicable evaluation period. The Contractor may submit a voucher for the earned award fee. Allocated but unearned fees will be retained by the Government and will be eligible to be earned by the Contractor in subsequent evaluation periods.

(c) The award fee shall not exceed $700,000 for the life of the contract.

B.3 UNIT PRICE RATE SCHEDULE

Offerors determined in the competitive range shall submit prior to discussions a completed unit price rate schedule. Attachment 6 of the solicitation.

Division 17 Clarifications

0. Specification Changes

The following changes shall apply to the Division 17 Specifications:

Add Paragraph 1.01 G. - Applicable Standards
The following standards and codes shall govern the design and selection of equipment supplied to fulfill the requirements of this section:

1. ANSI/ASHRAE Standard 135-1995: BACnet® - A Data Communication Protocol for Building Automation and Control Networks. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1995.

2. Addendum a to ANSI/ASHRAE 135-1995, "Annex J - BACnet/IP." American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1999.

3. Addendum b to ANSI/ASHRAE 135-1995. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 2000.

4. Addendum c to ANSI/ASHRAE 135-1995, first Public Review Draft, dated January 21, 2000. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 2000.

5. ATA/ANSI 878.1 (1992), ARCNET Local Area Network.

6. ISO/IEC 8802-3 (1993), Information processing systems - Local area networks - Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications.

Paragraph 1.02.B - Delete the list of approved contractors and replace with the following: (Note: Applies to General Building Controls)

1. Alerton Technologies, Inc.
2. Andover Controls Corp., Inc.
3. Automated Logic Corp.
4. Control Systems International
5. Delta Controls Corp.
6. Honeywell, Inc.
7. Johnson Controls Co., Inc.
8. Siemens Building Technologies (formerly Landis and Gyr Powers).

Paragraph 1.02.C - Delete the list of approved contractors and replace with the following: (Note: Applies to High Accuracy Controls (HAC) Labs only +/- 0.01 and 0.1 deg)

1. Andover Controls Corp., Inc.
2. Automated Logic Corp., installed by EMS Technologies of Crofton, MD.
3. Control Systems International, installed by Control Solutions, Inc. Lebanon, Ohio
4. Honeywell, Inc.

1. Base Price CLIN 0003 Clarifications

The following is offered as a clarification to current specification requirements for the provision of a native BACnet control system for the AML project:

Native BACnet HVAC controls system communications protocol shall be used for all HVAC controls within the building with the possible exception of the High Accuracy Controls (HAC) (+/- 0.01 and +/- 0.1 deg C) laboratories, which may utilize a proprietary (non-BACnet) system. HAC lab communication with the native BACnet building control LAN may be through the use of native BACnet control systems or through the use of a BACnet gateway device. Requirements for BACnet gateway devices are provided in paragraph 3 below. A building controls architecture diagram is provided in Figure 1 below for further clarification.

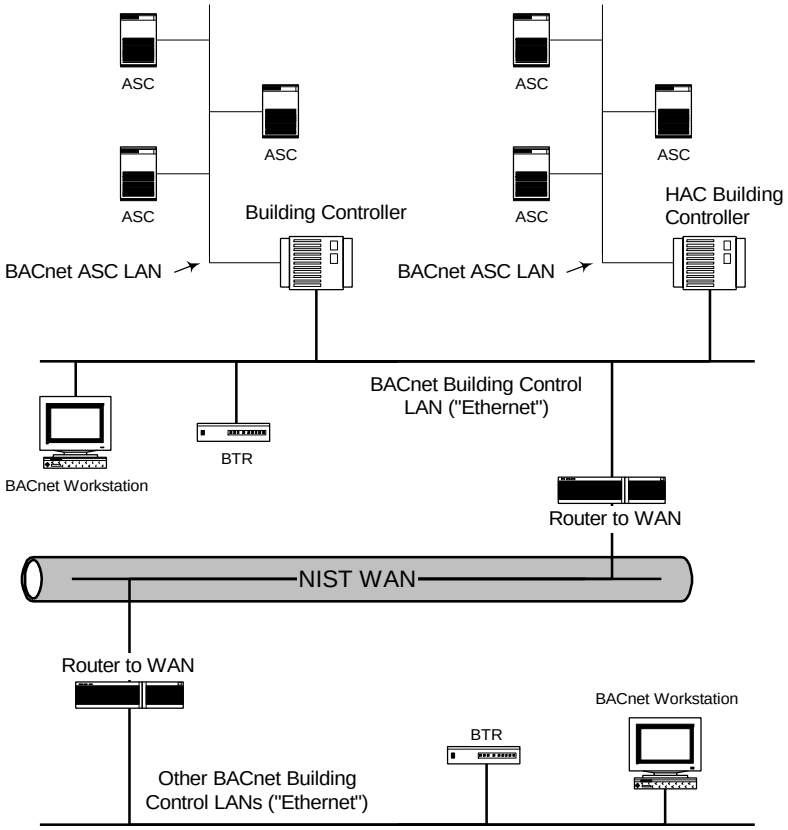

Figure 1. AML BACnet base bid network architecture.

2. Option to base Price CLIN 0003 for use of BACnet gateway devices:

The following is offered as a clarification to the introduction of Offer Option 15 (CLIN 0023) for the provision of a non-native BACnet control system for the AML project:

Offeror shall provide pricing for the deletion of the requirement to use native BACnet communication and to substitute the use of proprietary HVAC controls communications networks incorporating BACnet gateway device(s) into the system for communication with a NIST site-wide network. Pricing proposed for this option shall be the differential cost between Base Price CLIN 0003 and that same Item with the provision of a proprietary (non-BACnet) system capable of communicating with a BACnet compliant NIST site-wide system. The use of a BACnet gateway device is allowable under this option; however, if communication requirements are met, the same system may be proposed under both the Base Offer Item and this Option Item. Communications requirements for the High Accuracy Controls (HAC) (+/- 0.01 and +/- 0.1 deg C) laboratories remain unchanged from that described under Base Price CLIN 0003. Requirements for BACnet gateway devices are provided in Paragraph 3 below. A building controls architecture diagram is provided in Figure 2 below for further clarification.

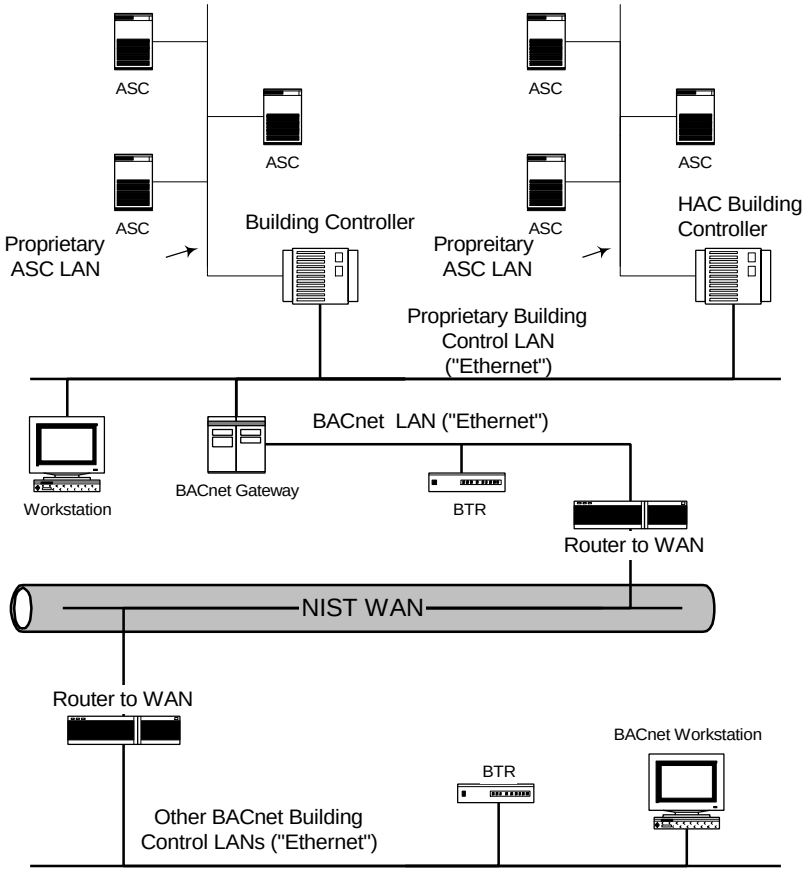

Figure 2. AML BACnet gateway alternate network architecture.

3.0 Gateway Requirements

All gateways provided to link non-BACnet control products to the BACnet internetwork shall meet the minimum requirements for BACnet gateways (G-GW) shown in B.8 (p.61) of NISTIR 6392[1]. All of the functionality described in this section is to be provided by using the BACnet capabilities shown in B.8 unless an exception is explicitly indicated.

Each gateway shall have the ability to expand the number of BACnet objects of each type supported by 10% to accommodate future system changes.

3.1 Data Sharing

Each gateway shall provide values for all points on the non-BACnet side of the gateway to BACnet devices as if the values were originating from BACnet objects. The gateway shall also provide the ability to modify (write to) all changeable points on the non-BACnet side of the gateway, including all software setpoints and other changeable values. This will allow BACnet devices the ability to access and adjust the status or value of all field changeable points on the non-BACnet side of the gateway.

3.2 Alarm and Event Management

Alarm and event management that meets the needs of the local site shall be provided based on a list of alarms provided in the drawings and specified functionality. BACnet event notification capabilities shall be provided for all alarmable points. Either "intrinsic reporting", "algorithmic change reporting", or both may be used.

It shall be possible to modify alarm limits, enable or disable notifications for particular transitions, and acknowledge alarms from a BACnet workstation. It shall also be possible for a BACnet workstation to retrieve summaries of all alarms that are currently in effect whether or not they have been acknowledged.

The categorization of alarms and the configuration of Notification Class objects shall be coordinated with the COTR to meet the project operational needs. It shall be possible to change alarm recipients and add other recipients in the future. It shall be possible to designate recipients based on the transition involved and by the time of day.

3.3 Scheduling

Schedules shall be represented in the gateway as BACnet Schedule objects. It shall be possible from a BACnet workstation to view and change schedules in the non-BACnet portion of the system using standard BACnet services.

4.4 Trending

Each gateway shall provide a way to collect and archive or "trend" (time, value) data pairs. It shall be possible for an operator to select up to 5% of the points in the building for simultaneous

[1] NISTIR 6392, GSA guide to Specifying Interoperable Building Automation and Control Systems Using ANSI/ASHRAE Standard 135-1995, BACnet. Available online from <http://www.bacnet.org/Bibliography/>

trending. If the system does not permit the trending of any arbitrary point, the vendor shall provide a list of the points that can be trended for approval by the COTR. The rate and duration of data collection shall be selectable by the operator. At a minimum the operator shall be able to select one minute, five minute, fifteen minute and hourly data collection rates. An initial list of trends to maintain for each site will be provided by the COTR.

4.5 Device and Network Management

Each device (or logical device) shall indicate its current status in the corresponding BACnet Device object.

Each device (or logical device) shall respond to requests to cease transmitting on the BACnet LAN until a subsequent command to resume transmission is received.

Each gateway and any devices that the gateway represents which have time of day information shall respond to workstation requests to synchronize the date and time.

Each gateway and any devices that the gateway represents shall support dynamic device binding and dynamic object binding.

Type	Amendment	RFI No.	Title	Answer
RFI	00003	00004	Wage Rates/ Fiber Optic Questions	
	1) Is there a page 2 of 4? I am looking for the wage rate for Fire Alarm Tech, Communication Tech, and Electrician. Do I or can I add these classification before bid day? 2) Where do you want the fiber to connect in Building 220? 3) Is there going to be a fiber spec? If not, what kind of jumpers do you want, as well as connectors, term, box, etc. 4) What class do you want the wire run (A or B)? 5) Do you want the fiber run in different conduits(supply & return)?			1) The most current wage determination was included in amendment 00001. 2) Extent of fire alarm system duct bank and location of connection to Building 220 are reflected on drawing E0-05 of the contract drawings. 3) to 5) For all questions regarding Fire Alarm System specifications, fiber-optic cabling and accessories, connections, etc., refer to specification section 16720. Simplex Time Recorder Co. is the only approved base manufacturer, and no substitutions are allowed by the contract specifications.
RFI	00003	00005	Fiber Optics	
	1) Will there be any fiber optic racks? If so, what type? 2) What type of jumper cables do you want? 3) Will there be inside and outside fiber optic cable? If so, what is the specifications on both? Do you want multimode and/or singlemode fiber optic cable? If so, where? 4) How many count fiber do you want? 5) What type of connectors do you want? 6) Will there be any duct bank work required for this project? If so, where, how long, is innerduct required, is a manhole required (what size), and do you want any spare? 7) How do you want to connect the network to the AML and the AML back to the fiber network?			1), 2), 3), 4), 5), and 7) For all questions regarding Fire Alarm System specifications, fiber-optic cabling and accessories, connections, etc., refer to specification section 16720. 6) Extent of fire alarm system duct bank and location of connection to Building 220 are reflected on drawing E0-05 of the contract drawings.
RFI	00003	00007	Division 17000	
	Throughout the Division 17000 specification, there are requirements for BACnet communications. The performance required by the temperatures control system however mandates Industrial quality components. Industrial control systems do not support BACnet communications. The specifications need to be revised to: 1) Delete all reference to the BACnet communications requirement or 2) Relax the temperature control accuracy of the High Accuracy Temperature Control Laboratory rooms that of the other labs. Additionally, none of the manufacturer's listed in Specification 1700 - para. 1.0.2B. and C. meet the BACnet communication as specified.			Refer to Attachment 2, of Amendment #3, for clarifications of Division 17 Requirements.
RFI	00003	00008	DDC Temperature Controllers	
	The specification for the High Accuracy DDC Temperature Controllers contains a paragraph requiring SELF-TUNING. The performance required of the controllers is such that self-tuning is not possible. Automatic tuning requires either the injection of, or the observance of , a disturbance to control. Any such a disturbance, large enough to provide tuning parameter data, will exceed the accuracy limits called for in the control loop in question.			Self-tuning is used as an aid in the initial adjustment and tuning of the control loop. As the writer indicates, it may be necessary to disable this feature when loop tuning is complete to prevent system disturbances from exceeding the accuracy limits.
RFI	00003	00009	Budget Estimate drawings	
	Are the new bid documents and drawings changed from the budget estimate dated August 1996, and if so what are the changes? Second are the original budget estimate drawings still available for review, and if so, where would we be able to find them?			The drawings have changed appreciably since 1996. This is not the same project and any list of the changes would be both misleading and incomplete. The 1996 documents have been superseded however they are available through Leet-Melbrook (301) 670-0090 for information only.
RFI	00003	00011	E0-0, 18, 13, and 16	
	1) On drawing E0-02 a note indicates that the underground feeders are to be routed to and connected to circuit breaker in existing switchgear in Building 306 as indicated on drawing E5-01. Drawing E5-01 is single line diagram. Please indicate the distance that this feeder needs to be extended into the building or provide more data to clarify the routing of this feeder. 2) On drawing E5-18 the detail for the steel flush floor ground plate shows a #1/0 AWG cu. tail to be brazed connected to the ground grid which is a #8 AWG mesh. It is intended that these connections be exothermic welds (cadwelds). 3) On drawing E5-13 detail 2 for the TGB indicates providing 10 bolts. Note 10 states to provide 20 bolts for each TGB and 36 bolts for each TMGB. Which is correct? 4) Refer to drawing E1-16 Key note 1, where is drawing E1-16 OP? If there is no drawing do the lights within the bubble on drawing E1-16 stay in the base bid?			1) The breakers are approximately 25m from Manholes 1, 3, and 4. 2) This refers to drawing E5-13, not E5-18. Provide exothermic welds. 3) Per Note 10. 4) At Dwg E1-16, Note 1: Delete reference to drawing E1-16-OP. Under option #1, there are no fixtures, etc required within the dashed area.

Type	Amendment	RFI No.	Title	Answer
RFI	00003	00012	Spec 16320/16611	
	1) Spec. 16320-2.02.A.4 indicates transformer, network protector and isolation switch are to be factory assembled. Spec. 16325-3.04B indicates Contractor to install protector on transformer throat. In our experience the contractor needed to field assemble the transformer, network protector and isolation switch. Please clarify. 2) Spec. 16611 indicates a wall mount battery disconnect for UPS battery. This disconnect switch is not clearly shown on the contract drawings to be separately mounted. Please confirm that a wall mounted disconnect switches required for all UPS battery systems. 3) Are the dimensions, which are specified or shown for lighting fixtures and suspended ceiling components to be considered as "hard metric" or "soft metric"? We assume the dimensions are"soft metric". Please clarify. 4) Network transformer is specified to have external secondary neutral bushings. No provisions are shown or specified to interconnect this neutral with the neutral (or insulated ground) of the bus duct feeding the substations. Pleas specify the physical arrangement for this jumper.			1) Contractor to install isolating switch. 2) Provide separately mounted disconnect for each UPS Battery System. 3) Light fixtures and suspended ceiling components are hard metric. 4) Provide external insulated ground bus from XO terminal to a transition section on the load side of the isolating switch.
RFI	00003	00013	E5-16	
	Drawing E-5-16 indicates reloc connectors on the 277v and 120v wiring at relay cabinets and dimming panels, and low voltage connectors on the control wiring for same. Drawing E4-12 details show conduits from lighting down through the service modules to the low voltage panel spaces. Specification section 16512 indicates that the contractor wiring is limited to line, load and control wiring to line and low voltage connectors. The cabinets as to how the wiring in conduit is to be interfaced with the connectors. We assume that the factory installed pigtail connectors will be provided with matching plugs. Please confirm our assumption is correct.			Delete connectors. Hard wire line, load and control wiring to labelled terminal within the cabinets.
RFI	00003	00014	Cleanroom light fixtures	
	Are clean room light fixtures electrically connected and jumpered together by Div. 13 Contractor or by Div. 16 Contractor? We assume all electrical work (except the homeruns) for the clean room light fixture is by Div. 13. Please confirm this assumption.			Division 16 to provide connection to each fixture as indicated on E1 series drawings. (i.e. note 8 on E1-11.1-OP).
RFI	00003	00016	Geotechnical Report	
	Please provide a copy of the geotechnical report.			The geotechnical report is available for viewing at NIST, Building 301, Room B117, Gaithersburg, MD 20899 or upon written request from the contracting officer.
RFI	00003	00017	DWG A3.5-00	
	How do we tell what faucet detail from DWG A3.5-19 goes with which SK-1 -SK-4 (sinks).			To determine the correct laboratory sink faucets, as indicated on drawing A3.5-00, refer to the "SYMBOLS" for "type of service" and "fitting number". As indicated, the fitting numbers correspond to the appropriate faucet details on A3.5-19. Sink types, required services and faucet types are shown on the individual laboratory floor plans in the Architectural Drawings.
RFI	00003	00018	DWG Sheet M2-01	
	DWG Sheet M2-01 in the service corridor's MW 1G01 and 05 the PW and PWC are shown as one line. Is this correct?			See "note" at lower right hand corner of Drawing below service galley main pipe sizes. Two (2) pipes not one (1).
RFI	00003	00019	Sheet A8.1-12 and Sheet M5-07	
	Drawing M5-07, Detail #12 has notes that point at supports and refer to Drawing A8.1-12, Details #7 and #7A. It is not clear which Division is providing the "Typical Service Carriers" described in these details. Which Division do these belong to? Please advise.			Please refer to Section 05505.
RFI	00003	00020	Drawing M4 -19 HP	
	There is not any condensate drain shown from AHU-207, AHU-206, AHU-210, and AHU-211. Where does this piping go and connect to? Please advise.			All coils connected to Secondary Chilled Water (SCW) System are non-condensing and therefore do not need condensate drains.
RFI	00003	00021	M8-02, M5-11, and M4-51	
	The CFM's for the AHU's indicated on the schedules seem to conflict with the number of coils indicated on schedules, details and air handling units plans and elevations. How many coil connections, for each coil set up, for each air handler are there? Please advise.			Coil piping shall be as detailed on M5-05.
RFI	00003	00022	DWG M2-09	
	Pipe rack running along DD column lines shows a 3/4" LHWC with 1 1/4 LHW branchins off and turning down to the lab area below, is this correct?			Please refer to General Note No. 3.
RFI	00003	00023	M8-04 and M4-19HP	
	Drwg. M8-04, Heat Recovery Coil Sched. shows HRC-201A with GWS as it server AHU-201. Drwg. M4-19HP shows 100mm EHRWS/R going to what should be HRC-201A in AHU-201. Does this mean that the EHRW System (Exhaust Air Heat Recovery Water) is filled with Glycol? Please advise.			Exhaust Heat Recovery Water (EHRW) System is a glycol water system as specified in 15510.

Type	Amendment	RFI No.	Title	Answer
RFI	00003	00024	Drwg M8-03 and M8-04	
	The Heating Coil Schedule on Drawing M8-03 and the Heating Coil Schedule on Drawing M8-04 are Identical. It seems the schedule on M8-03 got copied to M8-04 instead of being continued from Drawing M8-03 to M8-04. There are schedules for HC-330B. Where are the rest? Please advise.			See Amendment 0001 for second half of schedule.
RFI	00003	00025	Spec 15930	
	The Metropolitan Equipment Sales Corporation of Rockville, MD sent a Substitution Request, Spec 15930 Air Terminal Units.			This Substitution Request has been approved.
RFI	00003	00026	Drawing E-14 detail 3	
	Drawing E4-14 detail 3 and typical plan notes state conduit homeruns are NIC and are to be provided at hook-up, and conduit for data is to be provided at hook-up. Are we to assume thes conduits are not in the base bid?			These conduits are not in contract. They will be provided at hook-up along with other utilities which are capped at the Lab/Galley wall.
RFI	00003	00027	Spec 15100	
	15100 uses a lot of Stockham Valve Model and figure numbers for valve examples. Stockham Valve is out of Business. These valves can no longer be purchased. What other make, model, and figure numbers should be used for valve examples instead of Stockham Valve? Please Advised			Refer to listing of "Acceptable Manufactures" in 2.01.
RFI	00003	00028	15510 Page 10, para 2.09-4-A	
	15510 Page 10, para 2.09-4-A; say DN65 and larger: V-34. And 15100 Page 9, 2.02. II; which says V-34 is a Butterfly Valve example: Stockham L# - 5#2. What do the "#"s stand for? What is the Full Model or Figure Number for this valve? Please advise.			#'s are space holders in model number where the specification allows a choice, like body material, or may indicate an option elsewhere, like type of operation.
RFI	00003	00029	Spec 15510, Page 5	
	15510, Page 5, para 2.02-A-1; says Copper Type "L" with soldered joints and Mechanical Groove-End Coupling and Fittings may be used for sizes DN75 and larger. 15510, Page 6, para 2.02-A-2-d; says do not use black steel for Process Cooling water System (PCWS). It does not say not to use Galvanized Gooved Pipe, Coulpings, and Fittings. Can Galvanized Grooved Pipe, Couplings, and Fittings be used for Process Cooling Water System(PCWS)? Please advise.			15510 2.02 A.1. requires use of copper pipe for Process Cooling Water System. Statement about not using black steel for process cooling water (2.02 A.2.d) was added to emphasize that pcws was not included with CWS, SCW, LTGWS which can be copper or black steel.
RFI	00003	00033	Option #1 under Base Bid CLIN#1	
	Under solicitation requirements our firm understands that we are to : include all pricing for Option #1 under Base Bid CLIN#1. All other options are to be broken out as additive numbers. Please confirm in writing.			Option 1 shall be provided as part of CLIN 0001, 0002, 0003, and 0004 (see attachment). Option 3 is deductive, all other options are additive.
RFI	00003	00034	Spring Isolators	
	Do you want Spring Isolators per 15240 3.01.D.1? All pipe that is DN 100 or larger. Please define what systems are to be is isolated. Are they to include Storm and Sanitary Systems.			Sanitary and storm piping does not require spring isolators except for pumped discharge piping.
RFI	00003	00035	Spec 15140.14	
	Do you want Pipe Shields Inc. supports on Sanitary and Storm Piping Systems? Please define exactly what systems are to have pipe Shields, inc. Supports per 15140.14 size requirements.			Insulated portions of storm piping are to have Pipe Shields, Inc supports.
RFI	00003	00041	Suspend Metal Ceilings	
	Specialty Sales, Inc sent a request for substitution for Suspend Metal Ceilings, Spec 09515.			Approved as acceptable optional manufacturer for section 09515 - Suspended Metal Ceiling (subject to compliance with specified requirements). Added "Simplex Ceilings" to paragraphs 2.01.A. subparagrapns 1.b.(3), 2.b.(2) & 3.b. (3), by amendment.
RFI	00003	00042	DDC and High Accuracy Controls	
	EMS Consultants Inc sent in a request for Subsitution for DDC and High Accuracy Controls, Spec 17000-2			Refer to Attachment 2 of Amendment #3, for the addition of Automated Logic, for DDC and high accuracy controls. EMS Consultant's substitution has been approved.
RFI	00003	00045	Drawing S1-01F	
	The north-south building cut detail between column lines 6.1 and 7.5 refers to a detail 8; S3-32. Looking at drawing S3-32, there is no detail #8. Please clarify the correct detail number for that cut section.			The detail in question was added by Amendment Number 0001. Item S-3.
RFI	00003	00046	Paragraph 1.05 A.1	
	Paragraph 1.05 A.1 of Division 17000 requires the Operators Workstation to communicate with various Systems using Native Bacnet Protocol. The use of a Gateway is Prohibited. Control Systems International is not capable of the Bacnet communication without a Gateway. With a Gateway they can fully comply with the communications requirement. We respectfully request Control Systems International be allowed to communicate via the use of a Gateway.			Refer to Attachment 2, of Amendment #3, for clarifications of Division 17 Requirements.

Type	Amendment	RFI No.	Title	Answer
RFI	00003	00047	Pace Clean-Pak	
	Please be advised that Pace Clean-Pak listed as an approved Clean room Flow thru Grid System contractor is out of business. Please issue a few more approved applicable contractors.			The following companies in section 13064 are acceptable as optional manufacturers (subject to compliance with requirements): (1) Laminaire (2) Lepco (3) Meisser & Wurst (4) Texas Technology
RFI	00003	00048	STC 50	
	Intellimar, Inc. has sent a Substitution request for STC 50 Acoustical Door Assembles, spec section 08100-2, Article/ Paragraph 08000-2 D.14/D15			This substitution request has been approved.
RFI	00003	00050	Distribution Pumps	
	Ames, Inc sent a Substitution request for Distribution pumps, Spec section 15485, page 10, Article/Paragraph 2.08.			Aurora Pump Company is acceptable as a manufacturer. The substituted pump however must meet all of the specified criteria including but not limited to 316 stainless steel construction of the suction/discharge chamber, impellers, pump shaft, diffuser chambers, outer discharge sleeve and impeller seal ring retainers.
RFI	00003	00051	Spec. section 16450.3.02.G.2	
	Please refer to spec. section 16450.3.02.G.2, does the requirement for bonding bushing, bonding locknut or bonding jumper apply to all knockouts in metal enclosures or just factory punched concentric or eccentric knockouts. We are assuming unless clarified otherwise by amendment that this section applies only to the factory prepunched concentric/eccentric knockouts.			The requirements of 16450-3.02.G.4 apply to oversized, concentric or eccentric knockouts.
RFI	00003	00052	Emergency Fixtures	
	Guardian Equipment Company sent a Substitution Request for emergency fixtures, Spec section 15440, 2.03 para. A-D PG 15440-8.			Guardian Equipment Company is an acceptable manufacturer.
RFI	00003	00054	Section 11011 Central Vacuum System	
	1) What electrical controls are required? At the minimum, a motor starter is needed for the vacuum producer motor. 2) What type of motor starter is required? 3) What NEMA enclosure is required for the motor starter? 4) Will the vacuum system operate continuously? 5) Will the vacuum system be started and stopped at the motor starter or at the remote start/stop switch locations? If remote switches are used, how many will be required? 6) Is a timer needed so the vacuum unit can run for a designated length of time? 7) Is the vacuum unit discharge to be vented out of the area?			1) E2-06-OP shows a starter/disconnect for a 5.6 Kw (7.5 horse power) motor. 2) E5-18 calls for a NEMA size 1 starter 3) 16010 calls for NEMA 1 enclosure. 4) No, the vacuum system does not operate continuously. 5) There will be one remote switch 6) No, the timer is not needed so the vacuum unit can run for a designated length of time. 7) Yes, the vacuum unit discharge to be vented out of the area.
RFI	00003	00057	Paragraph 11601-2.02.B.14	
	Paragraph 11601-2.02.B.14 describes the isolation joints between the casework and demountable partitions. Paragraph 10625-2.01.L describes the same isolation joints. Please clarify which portion of the isolation joints shall be included in section 10625 and which, if any, shall be included in section 11601.			Provide under 11601 between counter top, or casework and demountable partition as indicated in drawings and specs. Provide isolation JT(joint) under 10625 between walls and floors or walls and walls intersection as indicated on drawings.
RFI	00003	00059	Section 15992	
	Durodyne East Corporation -- please clarify. Section 15992 is for "High Accuracy control System Performance Verification". This is not a manufactured item. Control Solution owns a bath, NIST calibrated SPRT, Black Stack and Instrulab data Acquistition instrumentation. We have the equipment to verify performance. We have also performed this service on the following labs at NIST...Gear, M-48, Mass, Excalibur. If Durodyne is the basis for test ports please clarify. Control Solution is experienced at NIST for performance concerning this section of the specs. We request that we be listed in an addendum as an acceptable certification company.			Durodyne East is manufacturer of the test ports to be used in the ductwork(15880). Testing agency can be any agency which can meet the performance qualifications of the specification.
RFI	00003	00063	Air Duct	
	Does the make up air duct require insulation?			Please refer to Spec. Section 15250-13 para. 3.04 (Ductwork, Non-Flexible) and Spec. Section 15250-14 para 3.05 (Ductwork Insulation, Flexible). Make up air ducts are supply air ducts and are required to be insulated.

Type	Amendment	RFI No.	Title	Answer
RFI	00003	00094	Section 1.05 B	
	Section 1.05 B Native BACnet System Requirements states that "All native BACnet control systems shall meet the BACnet System minimum requirements. ... BACnet building Controllers (B-BC) shall reside on the building control system backbone ISO 8802-3 (Ethernet) network. ... BACnet Application Specific Controllers may reside on any BACnet LAN Type. Sections 2.07 Digital Control Panels (DCP), 2.08 Modem Communication, 2.11 DCP, HAC and Operators Workstation Communication Software, and 2.13 Digital Control Panel Software make no mention of these requirements. There is no product specification for either a B-Bc or a B-ASC. Is every Direct Digital Controller, DCP or HAC or B-BC, B-ASC, on this project to communicate utilizing BACnet LAN Types as defined in ASHRAE Standard 195 BACnet.			Refer to Attachment 2, of Amendment #3, for clarifications of Division 17 Requirements.
RFI	00003	00095	Section 1.05 B	
	Section 1.05 B Native BACnet System Requirements states that "All native BACnet control systems shall meet the BACnet System minimum requirements. ... BACnet building Controllers (B-BC) shall reside on the building control system backbone ISO 8802-3 (Ethernet) network. ... BACnet Application Specific Controllers may reside on any BACnet LAN Type. Sections 2.07 Digital Control Panels (DCP), 2.08 Modem Communication, 2.11 DCP, HAC and Operators Workstation Communication Software, and 2.13 Digital Control Panel Software make no mention of these requirements. There is no product specification for either a B-Bc or a B-ASC. What product specification are we to use when selecting the B-BC and B-ASC hardware products?			Refer to Attachment 2, of Amendment #3, for clarifications of Division 17 Requirements.
RFI	00003	00096	Section 1.05 B	
	Section 1.05 BACnet Data and Communication Requirements reads that the "Operators Workstation must communicate with the various control systems components by using the BACnet protocol directly". Section 2.09 Operator's Workstation, 2.10 Portable Operator's Workstation and 2.12 Operators' Workstation software make no mention of this requirements Are all operators Workstation, Operators Workstation Software, and Portable Operator's Workstation to communicate exclusively utilizing the BACnet Protocol utilizing BACnet LAN types as defined in ASHRAE Standard 195 BACnet?			Refer to Attachment 2, of Amendment #3, for clarifications of Division 17 Requirements.

Award Fee Determination Plan

(In accordance with Federal Acquisition Regulation 16.404)

I. Overview of Award Fee Determination Plan

A. Purpose

The purpose of this Award Fee Determination Plan (AFDP) is to set forth the basic procedures and criteria for the periodic evaluation of, and award fee determination for, the construction of the Advanced Measurement Laboratory (AML), National Institute of Standards and Technology (NIST), Gaithersburg, MD.

This plan identifies the personnel responsible for the execution of this plan, discusses (in general terms) performance monitoring, and sets forth guidelines for the Award Fee Determination Board (AFDB). The AFDP is developed unilaterally by the Government.

The Contracting Officer (CO) and the Chairperson, AFDB, as a team, have the primary management responsibility for fair and equitable administration of this plan. Likewise, each party identified in this plan is responsible for accomplishing its responsibilities in a fair and equitable manner.

The award fee plan may be changed from time to time as the operational and/or program priorities at NIST and the Department of Commerce (DOC) change. The Contractor will be notified of the changes to the plan in writing before the start of the affected evaluation period. Changes to this plan that are applicable to the current evaluation period will be incorporated through negotiations. The CO has final determination of the award fee.

B. Specific Contract Data

The AML construction contract is a Fixed Price contract with an Award Fee. The contract period commences on the date of notice to proceed and includes any option periods and time extensions addressed in contract modifications.

The distribution of the available award fee across the performance evaluation categories is the sole responsibility and decision of the Government.

The Contractor shall designate in writing a primary point of contact with regard to the award fee process. The Government will conduct all award fee communications through this Contractor's representative.

The award fee will be based on performance in the following areas:
Quality
Safety
Schedule
Socio-Economic

The estimated cost of this contract is in the Price Range of $140,000,000 to $170,000,000. The maximum award fee shall not exceed $700,000.

The Government is considering coordinating evaluation periods with major project milestones. However, the current plan reflects that the evaluation periods will be three-month (quarterly) periods, with the first period extending from the contract award date until December 31, 2000. Subsequent periods will end on March 31, June 30, September 30 and December 31 of each calendar year of the contract period, until the contract completion date. The total fee available for each evaluation period is equal to the applicable percentage times the potential maximum fee for the entire contract ($700,000). See Attachment 2 for evaluation periods and the percentage of potential award fee available for each period.

Each evaluation will be completed within forty-five (45) days after the end of the evaluation period. The evaluation is considered complete on the date of the CO's written approval of the findings of the AFDB and transmittal to the Contractor's Corporate Office. The Government will brief the Contractor on the award fee determination at a mutually agreed time.

Any allocated but unearned fees during evaluation Periods 1-12 will be retained by the Government and will be eligible to be earned by the contractor in subsequent evaluation periods. This is to provide an incentive to improve performance during the contract. Attachment 2 will be modified to reflect distribution of any unearned fees from previous evaluation periods.

C. Interim Evaluations

At the Government's discretion, the AFDB may evaluate the Contractor's in-period performance at the approximate midpoint of the evaluation period. The results of any interim evaluation will be provided to the Contractor in writing, citing major strengths and weaknesses that could affect the rating. For each weakness cited, the Contractor shall have the opportunity to respond in a timely manner, setting forth plans for increasing effectiveness in the areas of weakness or explain why it is not feasible to do so. This interim evaluation will not result in a determination of award fee but will be considered in the final determination for the evaluation period. The Chairperson of the AFDB will also issue letters to the Contractor at any time when it is deemed necessary to highlight areas of Government concern.

D. Payment of Award Fee

The Contracting Officer (CO) will notify the Contractor authorizing payment of any award fee earned. Upon receipt of the authorization letter, the Contractor may submit an invoice for payment of the award fee. Payments from the award fee pool will be madewithin 30 days after receipt of an invoice, following each evaluation period.

E. Award Fee Integrity

The award fee process is recognized to be subjective in nature, but every effort will be made to assure fairness. Checks and balances have been incorporated into the process to safeguard against arbitrary and unfounded evaluations either for or against the Contractor.

F. Termination for Convenience

In the event that this contract is terminated for the convenience of the Government after the start of an award fee evaluation period, the award fee deemed earned forthat period will be determined by the AFDB. The remaining award fee dollars, including any unearned award fees from previous periods and fees for all periods subsequent to the termination shall not be considered available or earned and, therefore, shall not be paid.

II. Personnel Involved in the Award Fee Process

The Government will provide the Contractor with the names of personnel in the positions described in this plan prior to the applicable Award Fee evaluation period. In the event of personnel changes within evaluation periods, the Government will notify the Contractor as soon as possible.

A. Definitions

1. Technical Monitor (TM)

The Government Technical Monitors (TMs) will be designated to monitor, assess, record and report the technical performance of the Contractor on a continuous basis. The TMs will monitor the Contractor's performance as outlined in the contract requirements. The Individual Event Report (IER) will be used by the TMs to note positive and negative events that occur during contract performance (See Attachment 1). The AFDB Chairperson will assign a monitor for each performance area or subarea to be evaluated under the contract. Monitors will be selected on the basis of their performance area expertise.

2. Principal Technical Monitor (PTM)

The PTM is responsible for reviewing each IER prepared by the TMs and other Government personnel, and furnishing an assessment of the event to the CO. The PTM is selected by the AFDB Chairperson and CO.

3. Contracting Officer's Technical Representative (COTR)

The Government's technical representative has overall responsibility for the technical requirements of the Contract. The COTR also provides professional advice to the PTM, as required.

4. Contracting Officer (CO)

The Contracting Officer (CO) is the official with the overall responsibility for overseeing the Contractor's performance. The CO also reviews the recommendations and reports of the AFDB in order to make the final determination of award fee for each performance period. The CO receives the determination of award fee from the AFDB and reviews it for contract compliance.

5. Award Fee Determination Board (AFDB)

A board of Government officials performs the in-depth review of all aspects of Contractor performance and recommends an appropriate award fee. The members of the AFDB are appointed by the CO. The AFDB will consist of the following personnel:

Chairperson	Deputy Program Manager
Members	To Be Designated by Chairperson
Recorder	Management Assistant

a. Chairperson, AFDB
Since the deliberations of the AFDB are "contract-bearing", the appointment of the Chairperson is in writing and made by the Contracting Officer (CO). The Chairperson is responsible for ensuring that the requirements of the AFDB are met, and that a formal report of the boards decision is submitted to the Contracting Officer within forty-five (45) days of the end of the evaluation period.

b. Members, AFDB
The members of the AFDB are responsible for performing in-depth reviews of all documentation submitted by the Principal Technical Monitor (PTM) and the technical monitors (TMs). After discussions, the board will arrive at a consensus score for each category and determine the total amount of award fee.

c. Recorder, AFDB
The Recorder is responsible for taking and distributing minutes of all AFDB meetings, maintaining AFDB files, ensuring distribution of board recommendations and correspondence, and tracking actions for timely execution.

6. Event

A significant occurrence, outcome or result, either positive or negative, that may be used to evaluate performance under the contract.

B. Responsibilities

1. **Technical Monitor (TM)**

Each TM is responsible for monitoring, assessing, recording, and reporting the technical performance of the Contractor on a continuous basis. To accomplish these responsibilities, the TM must be thoroughly familiar with the following:

The Construction Documents (contract plans and specifications)
The Contractor's Quality Control Plan
The Contractor's Safety Plan
The Contractor's Construction Schedule
The Contractor's Subcontracting Plan
The Award Fee Plan
The Government's Quality Assurance Plan

The TMs will take the following actions to produce the documentation required for the AFDB:

a. Record performance information on the IERs. The recording of each event must be supported by sufficient information to provide the reader with a clear understanding of the significance of the event and its impact on the contract. The report should include a clear statement of the work expected by the Government and the work actually performed.

b. Submit completed IERs to the PTM.

c. Judge each event in accordance with the following definitions of Contractor performance:

(1) Very Good: The event is indicative of performance that is consistent with the best that any Contractor could be expected to perform.

(2) Good: The event is indicative of performance that frequently surpasses the marginal level.

(3) Marginal: The event is indicative of an acceptable level of performance and meets the minimum standards.

(4) Unacceptable: The event is indicative of performance that does not meet an acceptable level.

TMs must report all factual events that they judge to be indicative of "very good" or "unacceptable" performance. Performance at the "marginal" and "good" levels will not always be reported.

2. **Principal Technical Monitor (PTM)**

The PTM is responsible for receiving, evaluating, investigating (if necessary), and assessing each IER submitted by the TMs. The PTM is also responsible for communicating positive as well as negative reports as soon as possible to the Contractor (through the CO).

The Contractor will be required to respond in writing to all "unacceptable" event reports within ten (10) working days. A copy of the Contractor's response will be attached to the negative report and submitted to the AFDB before the end of the evaluation period.

3. **Contracting Officer's Technical Representative (COTR)**

The COTR has the overall responsibility to monitor and evaluate the performance of the Contractor. The COTR facilitates communications between the Government and the Contractor.

The COTR is responsible for preparing and presenting all material required by the Board to make its assessment of the Contractor's performance in the AFDB meeting. The COTR will coordinate scheduling of the AFDB meeting and prepare the formal report (signed by the AFDB Chairperson) within forty-five (45) calendar days after the last day of the evaluation period.

4. **The Award Fee Determination Board (AFDB)**

Each member of the AFDB must be familiar with the contract scope and this plan. Board members should also be generally familiar with the Contractor's technical proposal.

During award fee meetings, the AFDB will perform an in-depth review of all documentation submitted to it by the COTR and will arrive at a consensus score for each category after discussions, and will determine the total percent of award fee to be awarded. Each member of

the board is responsible for performing his/her duties in a fair, equitable, and objective manner.

The AFDB will also determine the categories and relative weight of each evaluation category, prior to the beginning of each evaluation period, based on the comparable significance of each category to the program at that time.

5. **AFDB Chairperson**

The Chairperson is responsible for conducting the meetings of the AFDB and ensuring that the evaluation process is conducted in a fair, equitable, and objective manner. The Chairperson is also responsible for assuring that the views of each of the Board's members are heard and considered. Furthermore, the Chairperson assures that the report prepared for his/her signature reflects the opinion of the Board. The Chairperson is also a voting member of the Board. When appropriate, the Chairperson directs the board to change or re-prioritize the weightings given to the evaluation categories under this plan (for future evaluation periods), when the needs or priorities of the appropriate activity so dictate. The Chairperson is also responsible for briefing the Contractor on the findings of the AFDB award fee evaluation report.

6. **Contracting Officer (CO)**

The CO is responsible for approving the award fee plan and any changes to the plan. The CO will also review the AFDB's reports. This review will assure that the Board's rationale supports the performance evaluation categories' individual scores. If there is a problem in the Board's rationale for its assessment and award fee recommendation, then theCO will contact the AFDB Chairperson to arrange a discussion of the problem and find a mutually acceptable resolution and adjustment. If agreement cannot be reached with the AFDB Chairperson, theCO is ultimately responsible for the award fee decision and assuring contract compliance.

III. Performance Monitoring

A. Overview

The purpose of constantly monitoring and reporting on the Contractor's performance is to ensure that the Government receives the best contract performance possible. The TMs will monitor, evaluate, and assess Contractor performance. The TM's monitoring activities will focus on the technical aspects of the work outlined in the contract and work actually performed.

The PTM will be responsible for reviewing and assessing the documentation produced by the TMs and other Government personnel.

These assessments will then be reviewed by AFDB members and Contracting management to ensure a fair and objective evaluation of the Contractor's performance. It is important that the Contractor be

continuously aware of how its performance is perceived. A process of continuous feedback is designed to ensure that the Contractor may improve its performance to the "Full Achievement" level. With this end in mind, both the Government and Contractor shall profit through outstanding performance and support for NIST's mission, with improved ratings and higher awards.

B. Performance Evaluation Categories

For purposes of contract monitoring and assessment of performance, the Contractor's overall effort is divided into four performance evaluation categories. These are as follows:

1. Quality

In this category, the Contractor's performance in providing an end product that complies with the requirements of the contract is evaluated. This includes establishing and maintaining an effective Quality Control System in compliance with the contract clause entitled "Inspection of Construction", and with section 01400 of the contract specifications. The Quality Control System shall consist of plans, procedures and organization, shall cover all operations, both onsite and offsite, and shall be keyed to the construction schedule.

2. Safety

This category measures the effectiveness of the Contractor in conducting the project in a safe manner through the implementation of a job-specific Safety program. The Contractor's operations must comply with all applicable Occupational Safety and Health Administration (OSHA) Standards for Construction (29CFR1926) and OSHA General Industry Occupational Safety and Health Standards (29CFR1910), as well as NIST site-specific safety and health requirements.

3. Schedule

This category evaluates with the timely execution of the contract work as measured by a Critical Path Method (CPM) construction schedule. Particular attention in evaluation will be given to the manner and completeness with which the contractor manages the sequence, logistics and organization of the construction project, as well as the overall success in keeping the work on schedule. The CPM schedule shall include specific, significant contract milestone dates, individual tasks, their duration and relative costs, and details of the project critical path.

4. Socio-Economic

This category assesses the Contractor's ability and willingness to provide small business, small disadvantaged business, women-owned small business and HUBzone small business the

maximum practicable opportunity to participate in contract performance, by evaluating the contractor's success in achieving the subcontracting goals contained in the contract.

Evaluation of this factor will be based on how the Contractor's actual small business subcontracting percentages (by dollar amount) compare with their subcontracting plan percentages (by dollar amount).

C. General Evaluation Criteria

The following are general criteria by which the Government will evaluate the Contractor's work within the framework of the Performance Evaluation Categories:

1. **Teamwork**
Teamwork refers to the level of professional cooperation and interaction in supporting the Government under this contract by Contractor personnel. TMs will identify the strengths and weaknesses of Contractor's staff by analyzing the level of commitment to team building and cooperation in working toward the common goal of a safe, quality and timely product.

2. **Ingenuity**
Ingenuity entails the development, by the Contractor, of original solutions to problems that result in savings of time, money, manpower, or improvements in the support functions or operational systems.

3. **Responsiveness**
This criterion involves the promptness and degree of concern with which the Contractor responds to the needs, requests, and demands of the Government in accordance with the contract requirements.

4. **Thoroughness**
Thoroughness refers to the "absolute" completion of an activity to include ensuring that all related aspects and documentation of the task have been attended to.

5. **Timeliness**
Timeliness refers to the on-time completion of tasks, whether scheduled with established completion dates/times/milestones and deadlines, or as unscheduled tasks, such as corrective actions for identified deficiencies.

6. **Resourcefulness**
Resourcefulness considers the Contractor's response to the use of safe and appropriate alternate resources (methods, personnel and equipment) to accomplish a contract activity.

7. **Accuracy**
This criterion applies to the Contractor's compliance with the tolerances and prescribed standards of performance under the contract.

8. **Communication**
This area refers to adequacy and efficiency of channels of communication within the Contractor's own organization and with Government personnel. Also considered will be the extent to which the Contractor exhibits initiative in establishing and maintaining full and open lines of communication with the Government.

9. **Autonomy**
Autonomy refers to the degree to which the Contractor makes prompt and effective business decisions.

10. **Contract Management**
This area refers to the Contractor's overall ability to appropriately use and control all resources and systems which support the contract, as well as effectiveness of management programs and their effect on contract performance.

D. Documentation/Reporting

1. **Documentation**

The TMs will be required to use the "Individual Event Report" (See Attachment 1) to record both positive and negative evaluations of the Contractor's performance. Note that the format will require documentation reflecting the TMs' understanding of what the Contractor was supposed to do, what was actually done, and the impact or consequences of what was done.

The PTM reviews each IER and provides his/her assessment of the facts, circumstances, and opinions outlined by the TMs. When appropriate, the PTM may investigate the event further to determine if all the facts and circumstances surrounding the event were considered.

2. **Reporting**

a. Technical Monitor Reports

Technical Monitors will submit reports monthly to the Principal Technical Monitor (PTM) in accordance with Exhibit 2. As part of this report, TMs will provide the adjectival rating, as well as supporting narrative, for each category they are responsible for monitoring.

The following areas are the minimum (but not all-inclusive), reporting requirements:

(1) A narrative report for each of the items listed under the four performance evaluation categories;

(2) A narrative report of the contractor's performance under the general criteria;

(3) Analysis of the Contractor's compliance with the reporting requirements.

b. Principal Technical Monitor Report

At the end of each evaluation period, the PTM will prepare a summary of the significant Individual Event Reports (IERs) and the Technical Monitor Reports (TMRs), and will transmit this entire package to the AFDB.

IV. Award Fee Determination Guidelines

A. Evaluation Overview

Government personnel (principally the TMs and the PTM) monitor, assess, document, and report on the Contractor's performance. AFDB members review and assess the reports submitted by the TMs and the PTM, decide upon the amount of the fee to be awarded, and communicate the decision to the Contractor's management through theCO.

The constant monitoring performed by Government personnel enables the Government to ensure that contract priorities are satisfied, and to identify performance problems before they become significant.

During the evaluation process, the Contractor will be able to respond to negative evaluations in writing or clarify the situation as the negative performance occurs. The constant feedback and interchange of ideas fosters an optimum climate for contract performance.

It is important that the integrity of the evaluation process be maintained at all times to ensure that reasonable judgment has been made in the fee determination process.

B. Performance-Rating Spectrum

The following summarizes the performance scoring range, the description of each element in that range, and the method for converting the score to an award fee percentage to be applied.

Scoring Range	Description	Conversion to award fee percentage
85-100	**Full Achievement**	**85-100**
	In the areas of Quality and Safety management, performance is consistently at a level considered the best any Contractor could be expected to achieve, under similar circumstances. Inspections seldom find deficiencies. Project work is on or ahead of schedule, and the contractor is achieving or surpassing their stated socio-economic goals.	
65-84	**Substantial Achievement**	**65-84**
	Contractor frequently performs "very good" in most of the areas defined by the general criteria. No major quality or safety problems have been identified during the evaluation period. Critical Path work is on schedule, although non-critical work may lag behind. Minor problems are quickly recognized and corrected. The contractor is not meeting their socio-economic goals, but has come very close and has made a good faith effort in accomplishing a positive program of socio-economic compliance. The Contractor may earn award fee at this level even though the goals have not been met.	

50-64	**Partial Achievement**	**50-64**
	Consistently achieves "marginal" performance in all areas defined by the general criteria. Minor quality and safety problems have been identified, requiring corrective action. Areas requiring improvement are approximately offset by better performance in other areas. Moderate number of customer complaints - corrective action is prompt, however, sometimes ineffective. Critical Path activities of the project are on or slightly behind schedule, but the contractor is taking steps to correct the problem(s). The contractor is not achieving their stated socio-economic goals, and is not very close to achieving them. However, the Contractor has made a good faith effort to comply with their stated goals. The Contractor may earn award fee at this level even though the goals have not been met.	
0-49	**Unacceptable**	**0**
	Areas of "marginal" or better performance are significantly offset by "unacceptable" performance in other areas. Quality and safety performance indicate a need for the Contractor to take immediate corrective action. Management/supervision is weak, resulting in ineffective schedule management. Sporadic omission of work occurs. Complaints are frequent. The contractor is not meeting their stated socio-economic goals, and has not acted in good faith in providing a positive socio-economic program as described in their approved subcontracting plan. Performance is having a negative impact on the overall Government mission. Performance is at a level where the Government may consider termination action. NO FEE IS EARNED BY THE CONTRACTOR IN THIS RANGE.	

After the AFDB arrives at a score for a Performance Evaluation Category, the score is converted to a percentage, which is applied to the amount of award fee available in that Performance Evaluation Category. The total recommended award fee for the evaluation period is the sum of the recommended fees for each performance evaluation category. (See Exhibit 1.)

For example only, a calculation for Period 2, 1 Jan 01 - 31 Mar 01, 2001, could be:

Performance Evaluation Category	Maximum Award Fee Available	Score	Percentage	Approved Award Fee
Quality (25%)	$12,250	90	90	$11,025
Safety (25%)	$12,250	85	85	$10,413
Schedule (25%)	$12,250	95	95	$11,638
Socio-Economic (25%)	$12,250	100	100	$12,250
Total	$49,000			$45,326

(Total earned weight or composite score, 92.50)

C. Procedures

Prior to award fee determination, each member of the AFDB should review the Individual Event Reports (IER). The AFDB will apply the evaluation criteria to active deliverables and current milestones. Active deliverables and current milestones are those to which effort is directed during the evaluation period. The Board Members should discuss and assess the Contractor's performance based on a review of all pertinent documentation. The Board should then arrive at a score for each Performance Evaluation Category. The Board will arrive at its score by averaging individual scores or by arriving at a consensus rating for each Performance Evaluation Category.

The Board will then agree on the wording of the narrative that supports the rating given by the Board.

Within forty-five (45) days after the completion of the evaluation period, the Chairman, AFDB will forward the signed report to the CO. Copies of the signed report will be furnished to the AFDB members. The CO will review the report and accompanying documentation. The CO will then send a letter to the Contractor authorizing the Contractor to invoice the Government for the applicable award amount. The final AFDB report for the evaluation period will be briefed to the Contractor by the Government at a mutually agreed upon time, but not to exceed 60 days after end of award fee period.

EXHIBIT 1
DISTRIBUTION OF AWARD FEE

Performance Evaluation Category*	Weightings (Percent)*
Quality	**25**
Safety	**25**
Schedule	**25**
Socio-Economic	**25**
TOTAL	**100**

[* Note- Categories and weightings are subject to change in accordance with the Award Fee Plan]

EXHIBIT 2
PROCESS AND SCHEDULE FOR AWARD FEE EVALUATIONS

The following chart promulgates the activities, timing, and corresponding responsible parties in the award fee process.

Responsible Party	Activity	Calendar days after end of performance period
AFDB Recorder	**Notify each board member, PTM, and TMs of award fee calendar and schedule meeting to decide changes to distribution for next period (See Exhibit 1)**	**15 days prior**
Contractor's Program Manager	**Clarifies or responds to negative evaluations at time of occurrence, but no later than the end of the performance period.**	**Prior to end of period**
Technical Monitors (TMs)	**Submits TMRs to PTM for consideration by the AFDB**	**Within 5 days**
Principal Technical Monitor (PTM)	**Prepares and distributes IERs and TMRs and summarizes contractor performance for evaluation period for input to the AFDB**	**Within 25 days**
AFDB Members	**Review documentation submitted by PTM and Contractor. Meet to decide upon recommended award fee.**	**Within 40 days**
AFDB Chairperson	**Conducts meetings of the AFDB. Prepares Board's recommendation and submits to CO. Directs changes to the award fee plan (as needed).**	**Within 45 days**
Contracting Officer (CO)	**Reviews AFDB award fee decision for contract compliance and submits invoicing authorization letter to Contractor.**	**45-50 days**
AFDB Chairperson	**AFDB Report Briefing to contractor**	**Mutually agreed upon time NTE 60 days**

Attachment 1:

INDIVIDUAL EVENT REPORT (IER)	
Technical Monitor:	**Date of Event(s) Reported:**
Contractor Notification (Indicate by whom, date/time, method of communication, any contractor response):	**Performance Categories Affected:** Quality ☐ Safety ☐ Schedule ☐ Socio-Economic ☐
Impact (+/0/-)/Significance(H/M/L):	**Evaluation Period Date(s):**
	Tracking No.: **PTM Acceptance Date:** **PTM Signature:** **FOR PTM USE ONLY**
Description of Event(s):	
Assessment: **Contract/Program Reference (Specification, drawing, etc.):** Document Page Paragraph	
Contractor Response Expected: ☐ Yes ☐ No ☐ Information Only	
Technical Monitor Signature:	**CO Signature:**

Attachment 2
Award Fee Evaluation Periods

Number	Program Milestones	Dates	Duration (Months)	% an (potential
1	First Evaluation Period	Award date to Dec 31, 2000	3	
2	Second Evaluation Period	Jan 1, 2001 to Mar 31, 2001	3	
3	Third Evaluation Period	Apr 1, 2001 to Jun 30, 2001	3	
4	Fourth Evaluation Period	Jul 1, 2001 to Sep 30, 2001	3	
5	Fifth Evaluation Period	Oct 1, 2001 to Dec 31, 2001	3	
6	Sixth Evaluation Period	Jan 1, 2002 to Mar 31, 2002	3	
7	Seventh Evaluation Period	Apr 1, 2002 to Jun 30, 2002	3	
8	Eighth Evaluation Period	Jul 1, 2002 to Sep 30, 2002	3	
9	Ninth Evaluation Period	Oct 1, 2002 to Dec 31, 2002	3	
10	Tenth Evaluation Period	Jan 1, 2003 to Mar 31, 2003	3	
11	Eleventh Evaluation Period	Apr 1, 2003 to Jun 30, 2003	3	
12	Twelfth Evaluation Period	Jul 1, 2003 to Sep 30, 2003	3	
13	Thirteenth Evaluation Period	Oct 1, 2003 to Contract Completion Date	3	

Note: Award fee periods may be modified to reflect changes to major project milestones, at the discretion of the Goverr

ATTACHMENT 3
ACRONYMS

AFDB	**-**	**Award Fee Determination Board**
AFDP	**-**	**Award Fee Determination Plan**
AML	**-**	**Advanced Measurement Laboratory**
CO	**-**	**Contracting Officer**
COTR	**-**	**Contracting Officer's Technical Representative**
DOC	**-**	**Department of Commerce**
GFE	**-**	**Government Furnished Equipment**
HUBZone	**-**	**Historically Underutilized Business Zone**
IER	**-**	**Individual Event Report**
NIST	**-**	**National Institute of Standards and Technology**
NTE	**-**	**Not to Exceed**
PTM	**-**	**Principal Technical Monitor**
TM	**-**	**Technical Monitor**
TMR	**-**	**Technical Monitor Report**